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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/667,238	09/17/2003	Yan C. Huang	023439	6990	
1726	7590 11/09/2006		EXAMINER		
INTERNATIONAL PAPER COMPANY 6285 TRI-RIDGE BOULEVARD			FORTUNA	FORTUNA, JOSE A	
LOVELAND,			ART UNIT	PAPER NUMBER	
			1731		
			DATE MAILED: 11/09/2006	5	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary		10/667,238	HUANG ET AL.			
		Examiner	Art Unit			
		José A. Fortuna	1731			
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with	the correspondence address			
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE in may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Depriod for reply is specified above, the maximum statutory period we are to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICA 36(a). In no event, however, may a repl rill apply and will expire SIX (6) MONTH cause the application to become ABAN	ATION. y be timely filed S from the mailing date of this communication. IDONED (35 U.S.C. § 133).			
Status						
1) 又	Responsive to communication(s) filed on 24 Au	iaust 2006				
	This action is FINAL . 2b) This action is non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
,—	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposit	ion of Claims					
4) 🛛	4)⊠ Claim(s) <u>1,2,5 and 7-23</u> is/are pending in the application.					
	4a) Of the above claim(s) is/are withdrawn from consideration.					
	5) Claim(s) is/are allowed.					
· · · · · ·	6)⊠ Claim(s) <u>1,2,5 and 7-23</u> is/are rejected.					
	Claim(s) is/are objected to.					
	☐ Claim(s) are subject to restriction and/or election requirement.					
Applicati	on Papers	,				
	•					
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
	under 35 U.S.C. § 119		Action of John 1 10-102.			
	•	andardh coada a 05 H 0 0 0 4	40() ()) ' (0			
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) All b) Some * c) None of:						
	1. Certified copies of the priority documents have been received.					
 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage 						
			ceived in this National Stage			
* 0	application from the International Bureau	` ','	anti-rad			
3	See the attached detailed Office action for a list o	or the certified copies not re	celvea.			
Attachmen						
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)		nmary (PTO-413) ⁄ail Date			
3) 🔲 Inform	nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date		mal Patent Application (PTO-152)			

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DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-2, 5, 7-23 are rejected under 35 USC §102/(b)/103(a). This rejection is set forth in the prior Office action mailed on April 24, 2006.

Response to Arguments

3. Applicant's arguments filed on August 24, 2006 with regard to the rejection over KR 2001056213 have been fully considered but they are not persuasive.

Applicants argue that the Boron compound is not added if a starch is used, but only when PVOH is used and shows a paragraph of the KR reference in which the borax and the starch can only be used in the alternative, i.e., either borax or starch or Glycerin could be used to cure the PVOH. The arguments are not convincing for the following reasons:

- The abstract clearly shows that the surface is treated either with PVOH or Starch and that the surface is treated with an aqueous boron solution.
- Applicants have not provided a complete certified copy of the KR reference. The
 examiner is relying on the abstract of the reference, an if applicants need to refer

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to the body of the reference, then a certified translation Must be submitted in order to give proper weight to the arguments.

It is important to note that as claimed the phrase "near the surface" renders the claims indefinite, since "near" is a relative term that has not been defined by the specification, i.e., since papers are very thin anything is near its surface, so it is recommended to change the phrase.

Also the following informalities in the specification should be corrected:

- Apaper@ on page 3, fourth line of the detailed description of the invention section.
- Ainternal sizing@ on the fifth line of page 6.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to José A. Fortuna whose telephone number is 571-272-1188. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tosé A Fortuna Primary Examiner Art Unit 1731